

Claims:

1. A building wall construction comprising an interior frame formed of a plurality of laterally spaced studs or beams, a layer of rigid foam insulation adjacent the exterior side of said frame and an interior wall connected to the interior side of the frame with the rigid insulation layer and interior wall forming a wall cavity therebetween, vertical venting channels formed on the interior side of said rigid insulation layer for collecting and removing moisture from the wall cavity and vertical venting channels formed on the exterior side of said rigid foam insulation for collecting and removing rain water, exterior building cladding adjacent the exterior side of said rigid foam insulation and a plurality of thin, low conductivity connectors extending through said layer of rigid foam insulation and connecting said exterior cladding to said studs or beams.

2. A wall construction according to claim 1 wherein the low conductivity connector comprises a thin band or low conductivity plastic material.

3. A wall construction according to claim 2 wherein the low conductivity connector comprises a thin metal strip having the portion thereof extending to the outside of the rigid foam insulation covered with a layer of high density, closed cell plastic foam.

4. A wall construction according to claim 1 wherein the interior frame is formed of wood or steel studs.

5. A wall construction according to claim 4 wherein the rigid foam insulation is in the form of panels having a thickness of about 1 to 3 inches.

6. A wall construction according to claim 5 wherein the rigid foam insulation panels are joined edge to edge by means of edge slots containing plastic splines.

7. A wall construction according to claim 6 wherein
5 screws extend through the splines and into the studs.

8. A wall construction according to claim 6 wherein the vertical venting channels are laterally spaced by a distance of about 2 to 4 inches.

9. A wall construction according to claim 2 wherein the
10 plastic connectors are flexible plastic straps.

10. A wall construction according to claim 2 wherein the plastic connectors are rigid plastic strips.

11. A wall construction according to claim 10 wherein the rigid plastic connectors are strips having sharp points
15 capable of piercing the rigid insulation.

12. A wall construction according to claim 2 wherein the plastic connector is formed of polyolefin.

13. A wall construction according to claim 12 wherein the polyolefin is polypropylene or polyethylene.

20 14. A wall construction according to claim 1 wherein the low conductivity connectors are joined to studs by means of screws.

15. A wall construction according to claim 1 wherein the exterior cladding is stucco on metal mesh lath and the plastic
25 connectors have loop portions which hook onto the metal mesh.

16. A wall construction according to claim 1 wherein the exterior cladding is bricks and the plastic connectors are joined to the brick wall by means of metal brick ties

extending from the outer ends of the plastic connectors into the brick mortar joints.

17. A wall construction according to claim 1 wherein the exterior cladding is siding connected to vertical furring strips which are connected to horizontal plastic splines.